

Claims

I claim:

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1 1. An imaging lidar comprising:

2 a pulsed laser for generating a line scan of light beam
3 pulses to illuminate an area surrounding a target;

4 a photomultiplier tube for detecting energy from said
5 light beam pulses scattered by said target and for generating
6 an output signal representative of said scattered light beam
7 pulses;

8 an image acquisition controller coupled to said pulsed
9 laser and to said photomultiplier tube for selecting pulse
10 width and pulse rate of said light beam pulses and for
11 generating a display signal from said output signal of said
12 photomultiplier tube;

13 and a display coupled to said controller for generating an
14 image from said display signal representative of said target.

1 2. The imaging lidar of claim 1 wherein said laser has a
2 wavelength corresponding to a blue-green color.

1 3. The imaging lidar of claim 1 wherein said pulse width is
about 5 ns.

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1 4. The imaging lidar of claim 1 wherein said pulse rate is
2 about 700 KHz.

1 5. The imaging lidar of claim 1 wherein said controller gates
2 said output signal from said photomultiplier tube to select a
3 range interval that includes said target.

6. The imaging lidar of claim 1 wherein said laser comprises a
periodically poled crystal gain element for generating a laser
output having a frequency that is a multiple of a pumping
frequency.

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